

THAT WHICH IS CLAIMED IS:

1. A method for preserving a session between an SNA application and a TN3270E server after loss of an Internet protocol ("IP") connection between the TN3270E server and a TN3270E client that is associated with the session, the method comprising:

reestablishing the IP connection between the TN3270E server and the TN3270E client; and then

forwarding a screen refresh request to the SNA application.

2. The method of Claim 1, wherein the method further comprises:

receiving a screen refresh from the SNA application; and

forwarding the screen refresh to the TN3270E client over the reestablished IP connection.

3. The method of Claim 2, wherein the step of forwarding a screen refresh request to the SNA application comprises sending an LUSTAT message to the SNA application.

4. The method of Claim 2, wherein the method further comprises:

receiving a user logon screen from the SNA application in response to the LUSTAT message;

forwarding the user logon screen to the TN3270E client;

receiving logon information from the TN3270E client;

checking the authenticity of the received logon information; and

forwarding the screen refresh to the TN3270E client over the reestablished IP connection only if the received logon information is authentic.

5. The method of Claim 2, wherein the screen
refresh received from the SNA application and forwarded
to the TN3270E client comprises a last data screen that
was forwarded from the SNA application and acknowledged
as received by the TN3270E client.

10 6. The method of Claim 1, wherein the method
further comprises:

receiving a user logon screen from the SNA
application in response to the screen refresh request;
forwarding the user logon screen to the TN3270E
client;

15 receiving logon information from the TN3270E
client;

checking the authenticity of the received logon
information; and

20 resuming the session if the received logon
information is authentic.

7. The method of Claim 4, wherein the steps of
forwarding a screen refresh request to the SNA
application, receiving a screen refresh from the SNA
application and forwarding the screen refresh to the
TN3270E client over the reestablished IP connection are
25 performed by the TN3270E server.

8. The method of Claim 2, wherein the IP
connection comprises a TCP/IP connection.

9. A method for reestablishing a TCP/IP

connection between a TN3270E client and a TN3270E server after loss of a first TCP/IP connection between the TN3270E client and the TN3270E server in which the TN3270E client connected to the TN3270E server under a
5 first Logical Unit ("LU") name, the method comprising:

receiving a connection request, wherein the connection request specifies the first LU name;

transmitting a query addressed to the TN3270E client over the first TCP/IP connection;

10 establishing a second TCP/IP connection in response to the connection request if a response to the query is not received within a specified time period; and

resuming communications over the second TCP/IP connection.

15 10. The method of Claim 9, wherein the query comprises a query to which the TN3270E client automatically responds.

11. The method of Claim 9, wherein the query comprises a timemark request.

20 12. The method of Claim 9, further comprising the step of authenticating the identity of the TN3270E client prior to resuming communications with the TN3270E client over the second TCP/IP connection.

25 13. The method of Claim 12, wherein the authenticating step comprises:

receiving an X.509 certificate over the second TCP/IP connection; and

verifying that the X.509 certificate corresponds to the TN3270E client.

14. The method of Claim 13, wherein the step of transmitting a query is only performed if the X.509 certificate corresponds to the TN3270E client.

5 15. The method of Claim 9, wherein the method further comprises forwarding a screen refresh request to the SNA application over the second TCP/IP connection.

16. The method of Claim 15, wherein the method further comprises:

10 receiving a screen refresh from the SNA application; and
 forwarding the screen refresh to the TN3270E client over the second TCP/IP connection.

15 17. The method of Claim 16, wherein the step of forwarding a screen refresh request to the SNA application comprises sending an LUSTAT message to the SNA application.

18. The method of Claim 16, wherein the method further comprises:
20 receiving a user logon screen from the SNA application in response to the LUSTAT message;
 forwarding the user logon screen to the TN3270E client;
 receiving logon information from the TN3270E client;
25 checking the authenticity of the received logon information; and
 forwarding the screen refresh to the TN3270E client over the second TCP/IP connection only if the received logon information is authentic.

19. A system for preserving a session between an
SNA application and a TN3270E server after loss of an
Internet protocol ("IP") connection between the TN3270E
server and a TN3270E client that is associated with the
5 session, comprising:

means for reestablishing the IP connection between
the TN3270E server and the TN3270E client; and

means for forwarding a screen refresh request to
the SNA application.

10 20. A system for reestablishing a TCP/IP
connection between a TN3270E client and a TN3270E server
after loss of a first TCP/IP connection between the
TN3270E client and the TN3270E server in which the
TN3270E client connected to the TN3270E server under a
15 first Logical Unit ("LU") name, comprising:

means for receiving a connection request, wherein
the connection request specifies the first LU name;

means for transmitting a query addressed to the
TN3270E client over the first TCP/IP connection;

20 means for establishing a second TCP/IP connection
in response to the connection request if a response to
the query is not received within a specified time
period; and

25 means for resuming communications over the second
TCP/IP connection.

30 21. A computer program product for preserving a
session between an SNA application and a TN3270E server
after loss of an Internet protocol ("IP") connection
between the TN3270E server and a TN3270E client that is
associated with the session, the computer program
product comprising a computer usable storage medium

having computer readable program code means embodied in the medium, the computer readable program code means comprising:

5 computer readable program code means for reestablishing the IP connection between the TN3270E server and the TN3270E client; and

computer readable program code means for forwarding a screen refresh request to the SNA application.

22. A computer program product for reestablishing
10 a TCP/IP connection between a TN3270E client and a TN3270E server after loss of a first TCP/IP connection between the TN3270E client and the TN3270E server in which the TN3270E client connected to the TN3270E server under a first Logical Unit ("LU") name, the computer
15 program product comprising a computer usable storage medium having computer readable program code means embodied in the medium, the computer readable program code means comprising:

computer readable program code means for receiving
20 a connection request, wherein the connection request specifies the first LU name;

computer readable program code means for transmitting a query addressed to the TN3270E client over the first TCP/IP connection;

25 computer readable program code means for establishing a second TCP/IP connection in response to the connection request if a response to the query is not received within a specified time period; and

30 computer readable program code means for resuming communications over the second TCP/IP connection.